



**CSA  
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**Selection and use of cylinders, spheres, tubes, and other containers for the transportation of dangerous goods, Class 2**



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# Preface

This is the fifth edition of CSA B340, *Selection and use of cylinders, spheres, tubes, and other containers for the transportation of dangerous goods, Class 2*. It supersedes the previous editions, published in 2002, 1997, 1988, and 1986.

It should be noted that this Standard, by itself, does not have the force of law unless it is officially adopted by a regulatory authority. Since regulations may adopt the Standard with certain exceptions or additional requirements, it is recommended that the regulations of the relevant jurisdiction be consulted in order to establish the extent to which this Standard has been adopted. Notwithstanding the provisions of this Standard, compliance with the provisions of the *Transportation of Dangerous Goods Act* and the Regulations thereto may call for additional requirements due to particular characteristics or properties of individual dangerous goods. Any requirements of the Transportation of Dangerous Goods Regulations regarding the handling, the offering for transport, and the transportation of dangerous goods in cylinders, spheres, and tubes are to be fully complied with.

For the development of this new edition, the CSA Technical Committee on Cylinders, Spheres, and Tubes for the Transportation of Dangerous Goods reviewed and made extensive use of the Transportation of Dangerous Goods Regulations of Transport Canada, Compressed Gas Association publications, and the US *Code of Federal Regulations*. This Standard takes into account proven experience and current technical advances made in the field.

Changes in the fifth edition include

- (a) revised requirements for valve protection;
- (b) the use of TC-3CCM, TC-3FCM, and TC-3HWM containers for the transportation of hydrogen;
- (c) revised packaging requirements for shipping TC-3HTM and CTC-3HT cylinders;
- (d) clarification of the “not liquid-full at 55 °C” requirement;
- (e) revised requirements for non-specification vacuum-insulated containers used for the transport of refrigerated liquefied gases; and
- (f) requirements for salvage containers.

This Standard is written in SI units except for the cylinder marking requirements, where the service pressure and, where applicable (e.g., Specification TC-39M), the test pressure are expressed in bar. However, for consistency in the design and test requirements of all containers, MPa and kPa have been retained as units to express service pressure. Considering the use of the “bar” unit by ISO (International Organization for Standardization) to mark service and test pressures, it was decided to use the same unit for marking service pressure in this Standard. The capital letter “M” has been added to each specification designation to identify formally that the container specification is metricated.

This Standard was prepared by the Technical Committee on Cylinders, Spheres, and Tubes for the Transportation of Dangerous Goods, under the jurisdiction of the Strategic Steering Committee on Mechanical Industrial Equipment Safety, and has been formally approved by the Technical Committee.

March 2008

## Notes:

- (1) Use of the singular does not exclude the plural (and vice versa) when the sense allows.
- (2) Although the intended primary application of this Standard is stated in its Scope, it is important to note that it remains the responsibility of the users of the Standard to judge its suitability for their particular purpose.
- (3) This publication was developed by consensus, which is defined by CSA Policy governing standardization — Code of good practice for standardization as “substantial agreement. Consensus implies much more than a simple majority, but not necessarily unanimity”. It is consistent with this definition that a member may be included in the Technical Committee list and yet not be in full agreement with all clauses of this publication.
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*Requests for interpretation should*

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# B340-08

## ***Selection and use of cylinders, spheres, tubes, and other containers for the transportation of dangerous goods, Class 2***

### **1 Scope**

#### **1.1**

This Standard covers safety requirements for the selection and use of cylinders, spheres, tubes, and other containers for the transportation of dangerous goods, Class 2.

#### **1.2**

This Standard covers requirements for the handling and filling of cylinders, spheres, tubes, and other containers for the transportation of dangerous goods, Class 2.

#### **1.3**

In CSA Standards, “shall” is used to express a requirement, i.e., a provision that the user is obliged to satisfy in order to comply with the standard; “should” is used to express a recommendation or that which is advised but not required; “may” is used to express an option or that which is permissible within the limits of the standard; and “can” is used to express possibility or capability. Notes accompanying clauses do not include requirements or alternative requirements; the purpose of a note accompanying a clause is to separate from the text explanatory or informative material. Notes to tables and figures are considered part of the table or figure and may be written as requirements. Annexes are designated normative (mandatory) or informative (non-mandatory) to define their application.

### **2 Reference publications**

This Standard refers to the following publications, and where such reference is made it shall be to the edition listed below, including all amendments published thereto. Where foreign Standards are referenced, only the technical content applies. Where there is a variance with this Standard, the requirements of this Standard shall prevail except in the case of Canadian regulations. Users of this Standard are advised against the direct application of any of the following reference publications without careful consideration of this Standard’s reference to that standard, specification, or code.

**Note:** See [Annex D](#) for information on the reference organizations.

#### **CSA (Canadian Standards Association)**

B51-03 (2007)

*Boiler, pressure vessel, and pressure piping code*

B52-05

*Mechanical refrigeration code*